

Figure 1

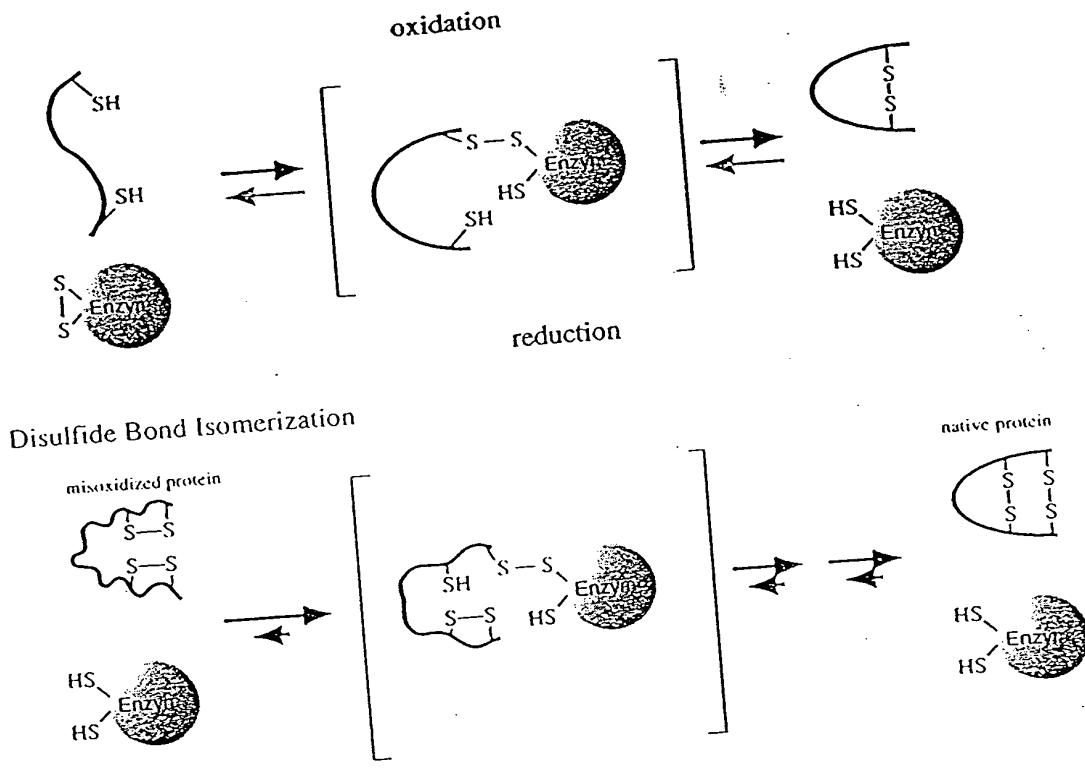


Figure 2

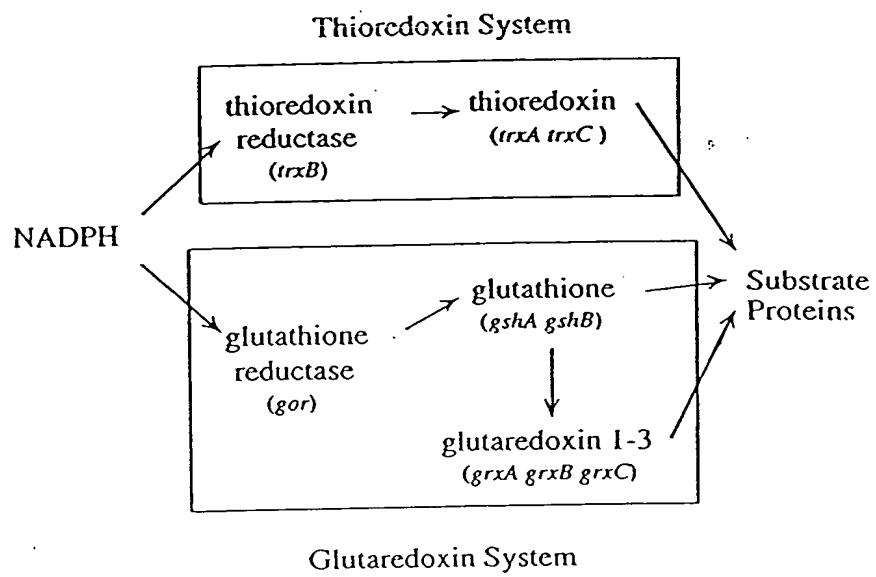


Figure 3

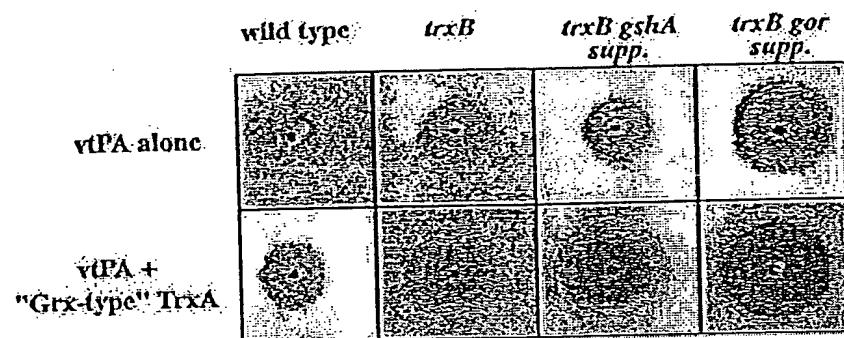


Figure 4

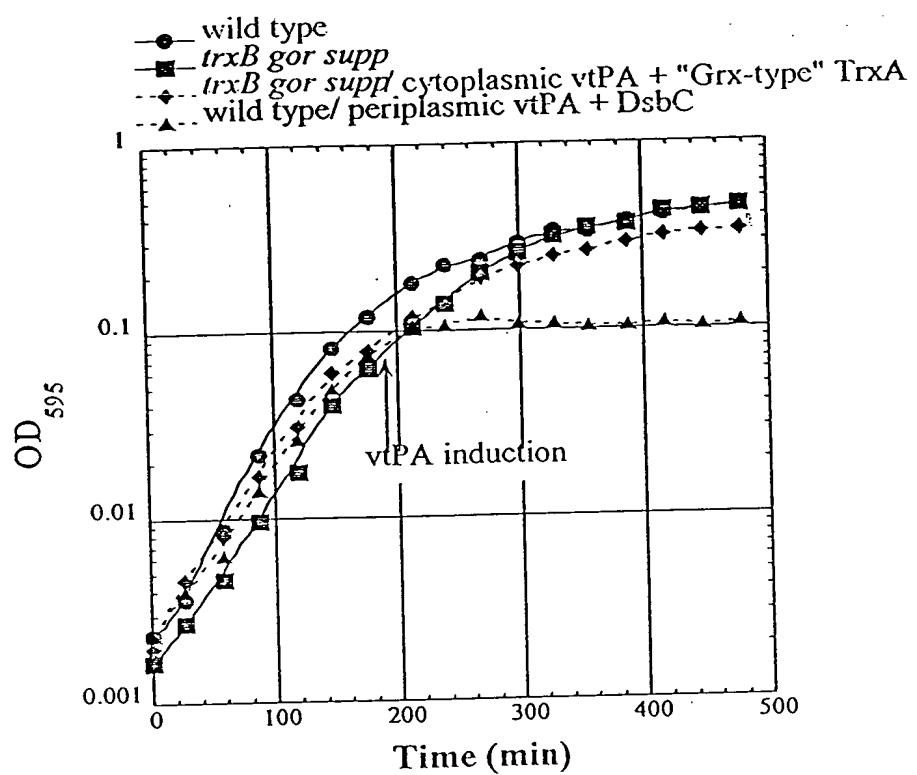


Figure 5

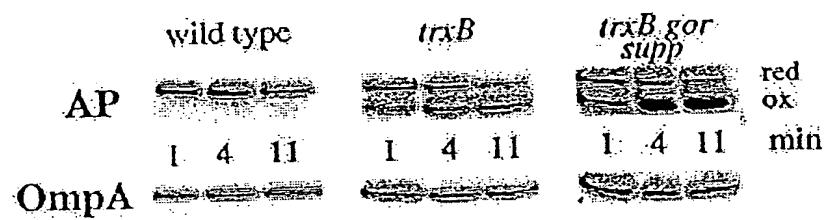


Figure 6

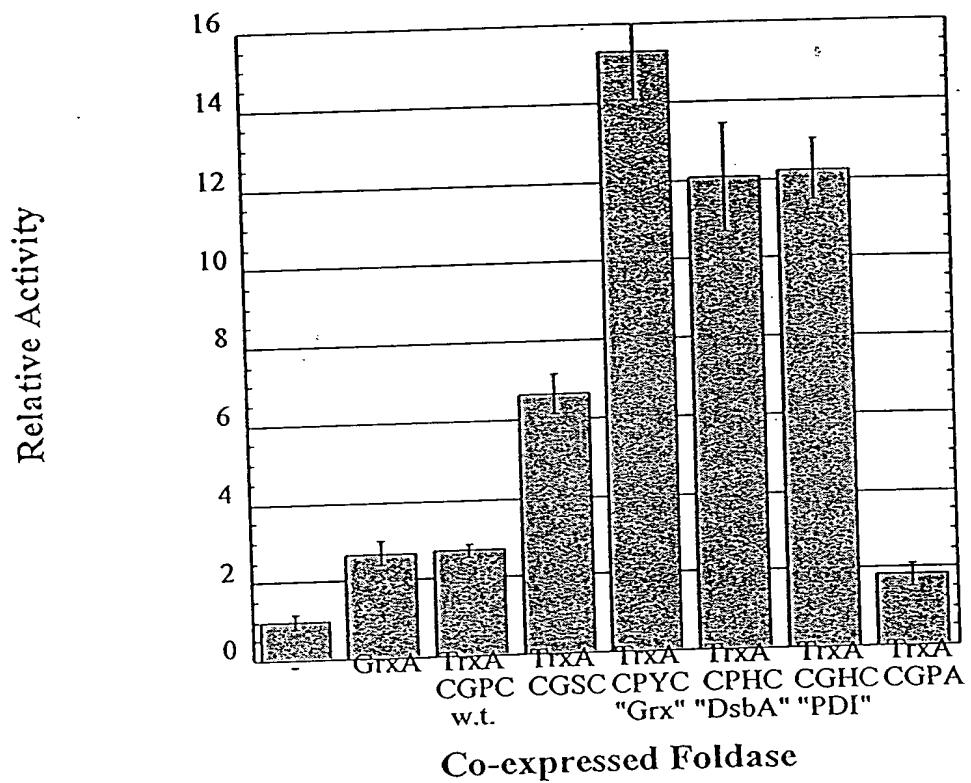
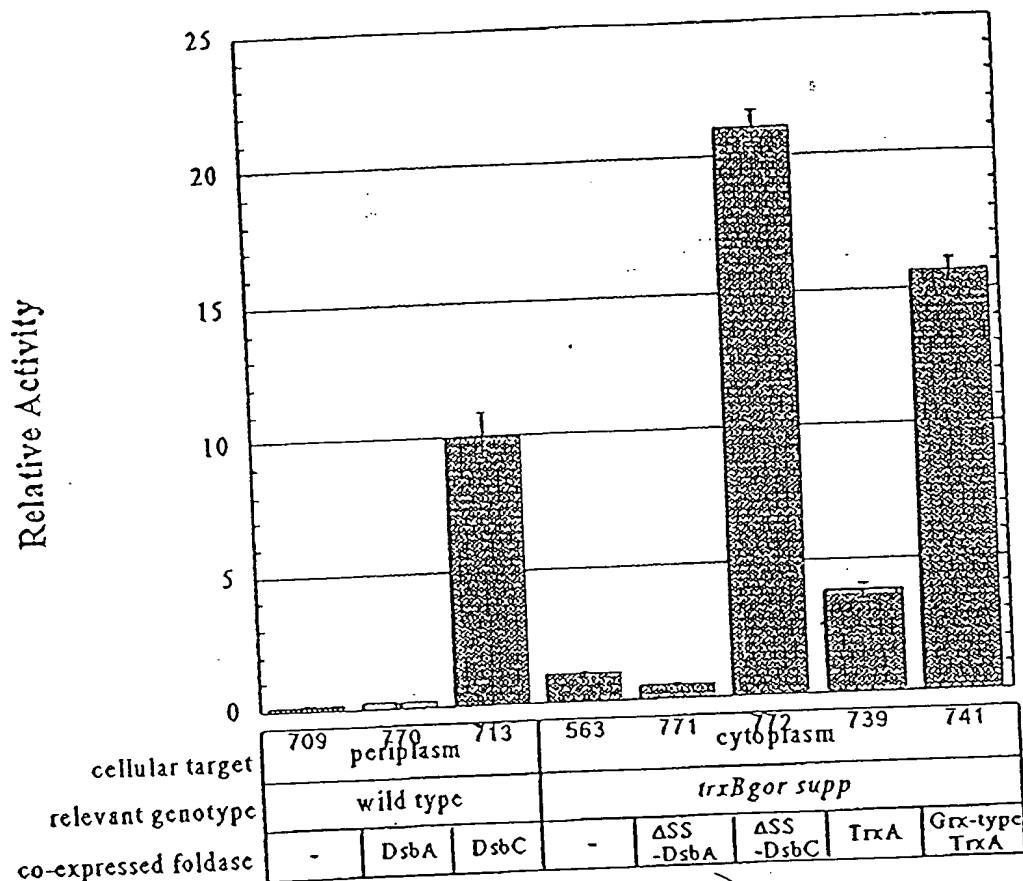


Figure 7



A triplet insertion in a *ahpC* restores growth to a *trxB gor* double mutant

wt
Ahpc

TGGAGCCGTCTTCTTCTTACCCGGCTGACTTTACTTCGTATGCCCG
W S V F F Y P A D F T F V C P
33 47

*Ahpc**

TGGAGCCGTCTTCTTCTTACCCGGCTGACTTTACTTCGTATGCCCG
W S V F F F Y P A D F T F V C P
33 48

A

B

E. coli 32 RWSVFFFYPADFTFVCPTELGDVADHYEEELQK
S. typhi 32 RWSVFFFYPADFTFVCPTELGDVADHYEEELQK
P. putida 32 KWSVVFYPADFTFVCPTELGDLADNYAEEFQK
S. mutans 32 KMAVFCFYPADFSFVCPTELGDLQEQYQYATLQS
B. subtilis 32 QWSVFCFYPADFSFVCPTELGDLQEQYQYALKE
S. aureus 34 SWSVVCFYPADFSFVCPTELDQNQYEEELQK
T. pallidum 33 SWAVFMFYPADFTFVCPTELADLARVYPSFVE
A. aeolicus 50 KWVILEFYPADYTFVCPTELADLAEKYDELKE
HUMAN_TPA 36 KYWVLFYPLDFTFVCPTELIAFTTVKRTSAK

Depending on the oxidative stress-inducing signal two different forms of AhpC can be found

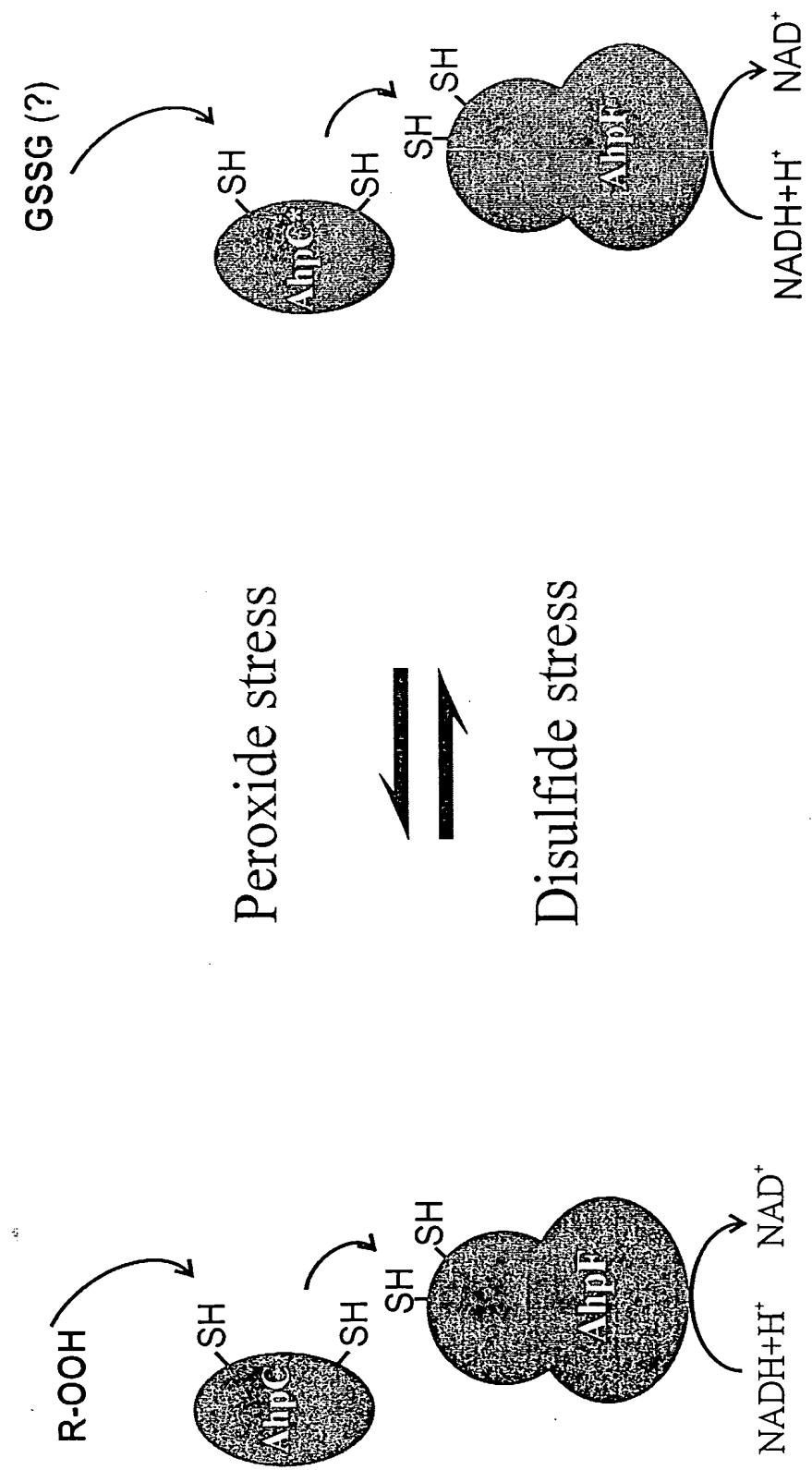
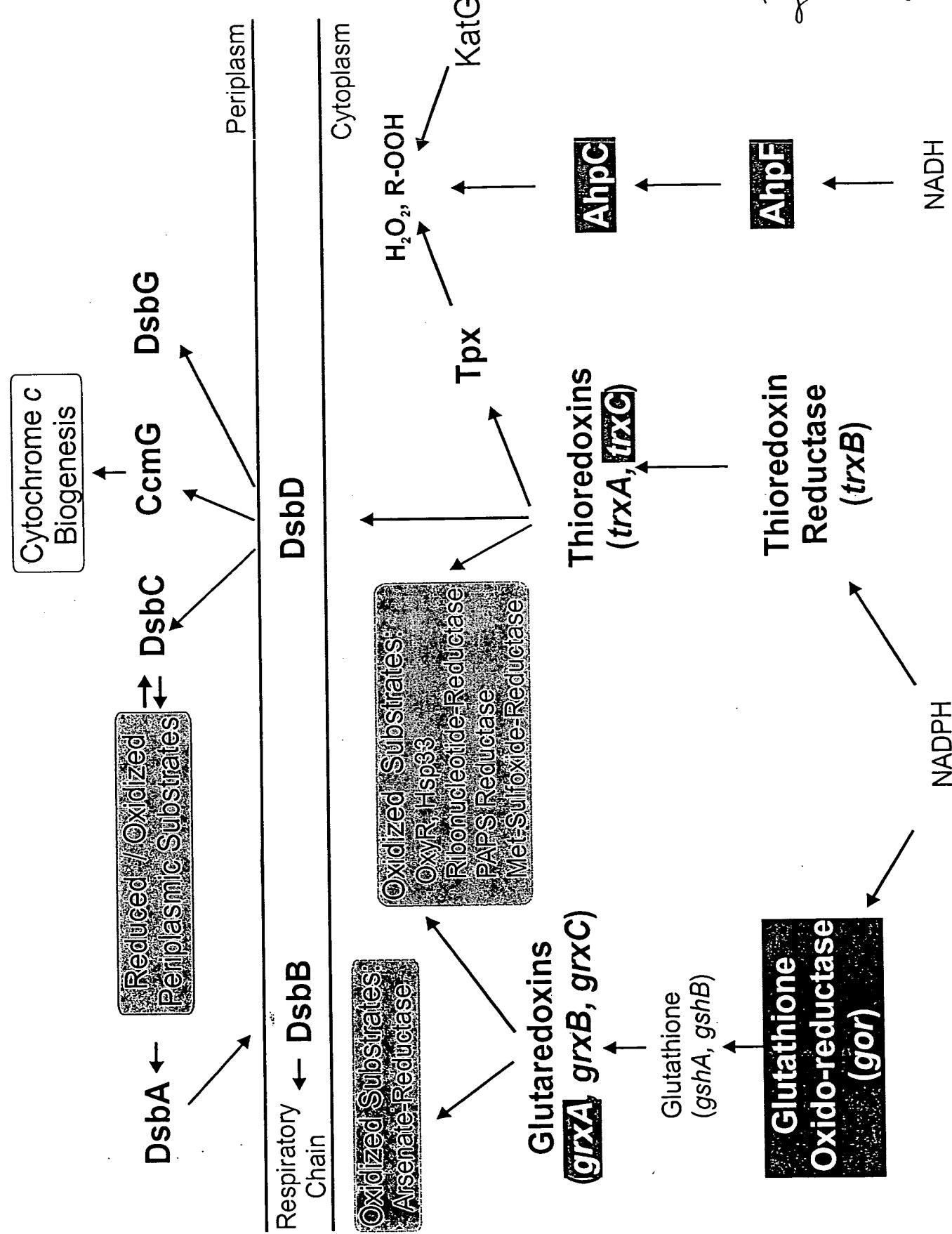


Figure 10



Thiol-Redox pathways in a *trxB gor* double mutant

